AMENDMENTS

In the Claims:

Please reiterate claims 8-15 and 16-25. Please amend claims 7 and 15. As of entry of this amendment, claims 7-25 will be pending.

7. (Thrice Amended) A method for protecting from peptidase degradation a therapeutic peptide sensitive to such peptidase degradation *in vivo*, said peptide comprising between 3 and 50 amino acids and having a carboxy terminus and an amino terminus and a carboxy terminal amino acid and an amino terminal amino acid, comprising:

(a) modifying said peptide by coupling a reactive group to the carboxy terminal amino acid, to the amino terminal amino acid, or to an amino acid located between the amino terminal amino acid and the carboxy terminal amino acid;

(b) forming a covalent bond between said reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase degradation, while retaining therapeutic activity of the therapeutic peptide; and

(c) analyzing the stability of said peptide-blood component conjugate to peptidase degradation and confirming that the peptide-blood component conjugate has a higher stability than the therapeutic peptide.

8. (Reiterated) A method according to claim 7, wherein the peptide-blood component conjugate is formed *in vivo*.

9. (Reiterated) A method according to claim 7, wherein the peptide-blood component conjugate is formed *ex vivo*.

11. (Reiterated) A method according to claim 7, wherein said reactive group comprises a maleimide group.

12. (Reiterated) A method according to claim 7, wherein said reactive group is coupled to said peptide via a lysine and/or a linking group.

13. (Reiterated) A method according to claim 7, wherein said blood component is albumin.

14. (Reiterated) A method according to claim 7, wherein one or more of said amino acids is synthetic.

15. (Thrice Amended) A method for protecting from peptidase degradation a therapeutic peptide sensitive to such peptidase degradation *in vivo*, said peptide comprising between 3 and 50 amino acids and having a therapeutically active region of amino acids and a less therapeutically active region of amino acids, comprising:

(a) identifying said therapeutically active region of amino acids by structure activity relationship analysis;

(b) modifying said peptide at an amino acid included in said less therapeutically active region by coupling thereto a reactive group to said amino acid to form a modified peptide, such that said modified peptide has therapeutic activity;

(c) forming a covalent bond between said reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase activity, while retaining therapeutic activity of the therapeutic peptide; and

(d) analyzing the stability of said peptide-blood component conjugate to peptidase degradation and confirming that the peptide-blood component conjugate has a higher stability than the therapeutic peptide.

16. (Reiterated) A method according to claim 15, wherein the peptide-blood component conjugate is formed *in vivo*.

17. (Reiterated) A method according to claim 15, wherein the peptide-blood component conjugate is formed *ex vivo*.

21. (Reiterated) A method according to claim 15, wherein said peptide has a carboxy terminus, an amino terminus, a carboxy terminal amino acid and an amino terminal amino acid, and wherein step (b) further comprises:

(a) if said less therapeutically active region is located at the carboxy terminus of said peptide, then modifying said peptide at the carboxy terminal amino acid of said peptide; or

(b) if said less therapeutically active region is located at the amino terminus of said peptide, then modifying said peptide at the amino terminal amino acid of said peptide; or

(c) if said less therapeutically active region is located at neither the amino terminus nor the carboxy terminus of said peptide, then modifying said peptide at an amino acid located between the carboxy terminus and the amino terminus.

22. (Reiterated) A method according to claim 15, wherein said reactive group is a maleimide group.

23. (Reiterated) A method according to claim 15, wherein said reactive group is coupled to said peptide via a linking group.

24. (Reiterated) A method according to claim 15, wherein said blood component is albumin.

25. (Reiterated) A method according to claim 15, wherein one or more of said amino acids is synthetic.

REMARKS

Reconsideration is respectfully requested.

Applicants respectfully request a telephonic interview in this case. The Examiner is requested to contact the undersigned at (415) 268-6237 to schedule the telephonic interview.

Claims 8-15 and 16-25 are reiterated. Applicants seek to amend claims 7 and 15 to reply to the Examiner's comments regarding the form of the claims and put the application in better form for consideration on appeal. As of entry of this amendment, claims 7-25 will be pending.

The amendment of claims 7 and 15 is supported by the claims as originally filed and the Specification at page 10, lines 1-15; page 6 lines 19-20; page 7, lines 7-8; page 10, lines 1-15; and page 70, lines 15-19.